

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re: the Application of

Kelvin G.M. BROCKBANK et al.

Group Art Unit: Unknown

Application No.: 10/670,724

Examiner: Unknown

Filed: September 26, 2003

Docket No.: 113024

For: METHOD FOR TREATMENT OF CELLULAR MATERIALS WITH SUGARS PRIOR TO PRESERVATION

INFORMATION DISCLOSURE STATEMENT

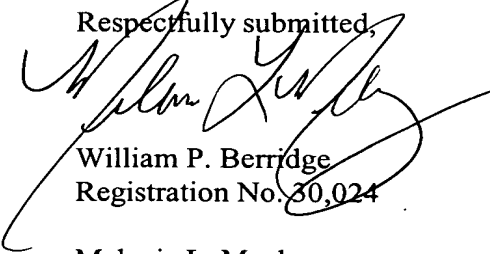
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application, OR (b) before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.
- ☒ 2. The present application was filed or entered the U.S. National Stage of the PCT after June 30, 2003. In accordance with the June 11, 2003, Notice waiving the requirements of 37 C.F.R. §1.98(a)(2)(i), copies of any U.S. patents and patent application publications are not attached.
- ☒ 3. A co-pending U.S. patent application is identified on Form PTO 1449 of this Information Disclosure Statement. The Examiner is respectfully requested to consider each cited application and the art cited therein during examination of the present application.

Respectfully submitted,


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WPB:MLM/jam

Date: December 31, 2003
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DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461
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Sheet 1 of 2

Form PTO-1449 (REV. 8-83)		US Dept. of Commerce PATENT & TRADEMARK OFFICE		ATTY DOCKET NO. 113024		APPLICATION NO. 10/670,724	
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)				APPLICANT(S) Kelvin G.M. BROCKBANK et al.			
				FILING DATE September 26, 2003		GROUP Unknown	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	
	1	U.S. Application 09/691,197	10/19/2000	KHIRABADI et al.			
	2	6,127,177	10/03/2000	TONER et al.			
	3	6,395,467	05/28/2002	FAHY et al.			
	4	6,274,303	08/14/2001	WOWK et al.			
	5	6,194,137	02/27/2001	KHARABADI et al.			
	6	6,187,529	02/13/2001	FAHY et al.			
	7	5,962,214	10/05/1999	FAHY et al.			
	8	5,955,448	09/21/1999	CALACO et al.			
	9	5,827,741	10/27/1998	BEATTIE et al.			
	10	5,648,206	07/15/1997	GOODRICH et al.			
	11	5,629,145	05/13/1997	MERYMAN			
	12	5,242,792	09/07/1993	RUDOLPH et al.			
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	
	13	WO 02/32225 A2	04/25/2002	WIPO			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
	14	POLCE et al., "Revival of Spermatozoa after Vittrification and Dehydration at Low Temperatures," <u>Nature</u> , Vol. 164, p. 666, October 1949.					
	15	LOVELOCK et al., "Prevention of Freezing Damage to Living Cells by Dimethyl Sulphoxide," <u>Nature</u> , Vol. 183, pp. 1394-1395, May 1959.					
	16	BROCKBANK et al., "Synergistic Interaction of Low-Molecular-Weight Polyvinylpyrrolidones with Dimethylsulfoxide During Cell Cryopreservation," <u>Transplantation Proceedings</u> , Vol. 25, No. 6, pp. 3189-3191, December 1993.					
EXAMINER					DATE CONSIDERED		
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Date: December 31, 2003

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
	17	SONG et al., "Vitreous Cryopreservation Maintains the Function of Vascular Grafts," <u>Nature Biotechnology</u> , Vol. 18, pp. 296-299, March 2000					
	18	CROWE et al., "The Role of Vitrification in Anhydrobiosis," <u>Annu. Rev. Physiol.</u> , Vol. 60, pp. 73-103, 1998.					
	19	POTTS, "Desiccation Tolerance of Prokaryotes," <u>Microbiological Reviews</u> , Vol. 58, No. 4, pp. 755-805, December 1994.					
	20	CROWE et al., "Interactions of Sugars with Membranes," <u>Biochimica et Biophysica Acta</u> , Vol. 947, pp. 367-384, 1988.					
	21	CROWE et al., "Anhydrobiosis," <u>Annu. Rev. Physiol.</u> , Vol. 54, pp. 579-599, 1992.					
	22	WOMERSLEY et al., "Inhibition of Dehydration-Induced Fusion between Liposomal Membranes by Carbohydrates as Measured by Fluorescence Energy Transfer," <u>Cryobiology</u> , Vol. 23, pp. 245-255, 1986.					
	23	De CASTRO et al., "Anhydrobiotic Engineering," <u>Nature Biotechnology</u> , Vol. 18, p. 473, May 2000.					
	24	EROGLU et al., "Intracellular Trehalose Improves the Survival of Cryopreserved Mammalian Cells," <u>Nature Biotechnology</u> , Vol. 18, pp. 163-167, February 2000.					
	25	BEATTIE et al., "Trehalose: A Cryoprotectant That Enhances Recovery and Preserves Function of Human Pancreatic Islets after Long-Term Storage," <u>Diabetes</u> , Vol. 46, pp. 519-523, March 1997.					
	26	ACKER et al., "Tissue Engineering," <u>Science & Medicine</u> , pp. 126-127, May/June 2000.					
	27	GUO et al., "Trehalose Expression Confers Desiccation Tolerance on Human Cells," <u>Nature Biotechnology</u> , Vol. 18, pp. 168-170, February 2000.					
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